

REMARKS

The Examiner cites a new combination of references and reject claims 29-39 under 35 U.S.C. §103 using Minns as the primary reference in view of Brodsky.

At the outset, it is noted that Applicant's method claim 29 recites reducing pump light in a region of a laser light exit of a laser resonator fiber where that laser resonator fiber has a fiber core surrounded by a pump fiber with a sheath thereon. Pump light is input so that laser light arises in the fiber core. At the laser light exit, as recited in claim 29 there is some remaining pump light. According to the invention of claim 29, it is desirable to remove this remaining pump light so that it will not interfere with the laser light at the laser light exit. This is accomplished by removing a portion of the sheath surrounding the pump fiber. Independent apparatus claim 36 is similar since it recites a fiber laser having a pump light and the other structure discussed above in relation to claim 29.

Minns, on the other hand, is not a fiber laser. Minns is merely an optical fiber for light guiding. This Minns optical fiber has an inner core 34, an inner cladding 36, an outer cladding 38, and a polymer coating 40, which is non-light transmitting. There is no pump light in Minns. There is no pump fiber in Minns. There is no laser fiber core in Minns. Minns is simply not a fiber laser. It is only an optic fiber for transmitting light.

In Minns, the coating 40 and outer cladding 38 are partially removed as shown in Fig. 2. Then, as shown in Fig. 3, a second outer cladding 44 is provided over the inner cladding 36. The thus structured optical fiber is then secured within a tube 46 as shown in Fig. 4 where it is held by a cured adhesive 48.

The entire purpose in Minns of removing the outer cladding and replacing it with another outer cladding is stated at column 3, lines 45-49 – namely that the


second outer cladding is harder than the first outer cladding. As recited at column 3, line 50 provision of this second harder outer cladding involves a slight increase in light attenuation within the end portion of the fiber. And at column 3, line 55, it is noted that the increased hardness of the second cladding reduces or eliminates problems caused by the softer first outer cladding during polishing and other mechanical manipulation of the fiber. This has nothing to do with the recitation in claims 29 and 36 of removing at least a portion of the sheath to allow remaining pump light to escape from the pump fiber to reduce pump light from being emitted with the laser light at the laser light exit. Minns cannot teach anything about the invention since it is not a laser resonator fiber. Furthermore, the purpose for removing the first outer cladding and substituting a second outer cladding only has to do with polishing. Furthermore, the removal of the coating 40 in Fig. 2 is of no consequence, since a cured adhesive 48 replaces the coating 40 in Fig. 4. Thus, not only does this reference have no relevance, but it also teaches directly away from the invention.

The Examiner would combine as a secondary reference Brodsky. Brodsky is indeed a fiber laser as shown in Fig. 1 which receives pump light from a pump source. Where Brodsky suggests nothing about reducing pump light from being emitted with the laser light at the laser light exit as recited in claims 29 and 36. Therefore, not only is there no motivation for one skilled in the art to combine Minns (which has nothing to do with a fiber laser) with Brodsky, but even if there was such a combination, the combined teachings would in no way suggest reducing pump light from being emitted with the laser light at the laser light exit.

Dependent claims 30-35 and 37-39 distinguish at least for the reasons noted with respect to the independent claims 29 and 36, and also by reciting additional

features which, combined with the independent claims, are not suggested by the combination of Minns and Brodsky.

Respectfully submitted,

 (Reg.#27,841)

Brett A. Valiquet
Schiff Hardin & Waite
Patent Department
6600 Sears Tower
Chicago, Illinois 60606
Telephone: 312-258-5786
Attorneys for Applicants
CUSTOMER NO. 26574

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BRETT A. VALIQUET

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